

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001277**Date Inspected:** 20-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, OBG 6BE, Miscellaneous Metal, Cross**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Office**

Attend to project documentation and sign backlog of inspection reports after review.

**OBG 6BE**

ZPMC scheduled a blasting Inspection for the work then cancelled the inspection as ZPMC QC rejected the work. Caltrans QA was not notified after walking to blast shop and an additional hour and a half transpired for blasting repairs to be completed. Caltrans QA was then performing inspection work in Trial Assembly area per ZPMC request.

**Miscellaneous Metal**

Base metal surfaces of 48, X201F splice plates were re-blasted to an SSPC SP-10 condition and Interzinc 22 re-applied after transport from trial assembly.

**Cross Beam #3**

Performed joint Inspection with ABF QA Bill Oak at trial assembly area load out pier internal areas required minor touch up with Interzinc 52, ZPMC personnel were in the process of affixing splice plates to the side plates and top stiffeners for storage during transport, workers were observed climbing along top plate across finish coated surfaces and carrying tools and equipment. ZPMC request for inspection of internal surfaces was incomplete as work in this Cross Beam was incomplete.

**Lift 3 East**

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## SOURCE INSPECTION REPORT

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Internal ceiling area ZPMC requested Final Inspection of applied coating despite incomplete NDT of welds on floor beams, pursuant to this fact no final acceptance of coating can be given until all NDT work is completed and damages repaired.

OBG 4BW/Lift 4 West

Caltrans QA observed ZPMC personnel utilizing dirty reclaimed/recycled abrasive for abrasive blasting operations on Cross beam bottom plate area. Caltrans QA Lumley informed ABF QA Bill Oak of situation and ABF Bill Oak directed ABF QA personnel to reject blast and inform ZPMC to utilize clean abrasive for blasting operations. Note: ZPMC QC unable to check/verify ambient conditions as QC has no equipment to do such.

OBG 6BE

Caltrans QA Lumley performed unsolicited inspection/follow-up of blasted surfaces and in process application of Interzinc 22 on interior floor "T" Stiffeners and bottom sections of Floor beams and Longitudinal Diaphragms. Blasted surfaces were SSPC SP-10 as observed and Longitudinal Diaphragms were not completely welded at the end of the segment where transverse welds will be done in the future to join segments.

Lift 4 West

Cross Beam terminus repairs and re-blasting with "new" clean abrasive from previous inspection as surfaces were rejected for utilizing "recycled" abrasive for blasting. Areas were re-abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 applied. These are repairs associated with trial fitting operations.

Suspender Brackets

ZPMC applied "mist coat" Interfine 979 to affixed brackets SB20E AND SB22E on Lift 4 East.

Cross Beam #3

Inspection of the internal surfaces after transport from the paint shop were requested, and ZPMC QC attempted to complete repairs while on shipping dock. Caltrans QA Lumley performed cursory inspection of repairs and informed ZPMC QC that additional work would be required as rust was still evident beneath catwalk and minor impact damages were evident from ZPMC operations within Cross Beam #3 from splice plate installation and storage operations. Re-inspection required. ZPMC QC informed Caltrans QA that once this unit was placed upon ship then there would no longer be an aerial lift available for use for inspection.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representatives were available for inspections and consultation.

### Summary of Conversations:

No relevant conversations on this day.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-9549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley,James
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert
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QA Reviewer
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